

REMARKS

This amendment is deemed to fully respond to all objections and rejections of the Examiner in the Office Action of February 28, 2003. Claims 1-20, being all pending claims, are now expected to be in condition for allowance. Entry of this amendment and reconsideration to that end is respectfully requested.

The Examiner has now apparently objected to Figs. 1, 2, 4-9, and 12 stating:

The drawings (Fig. 1, 2, 4-9 and 12) are objected to because all the labeled numbers should accompany (sic) with corresponding labels/names, i.e., in Fig. 1, number 32 should indicate (sic) as "subscriber box".

Not surprisingly, the Examiner has cited no authority for this position. None is deemed to exist. Nevertheless, in the spirit of cooperation and to further the prosecution of this application, Applicants have herewith submitted amended Figs. 1, 2, 4-9, and 12, in an attempt to comply with the Examiner's objection. No new matter has been added.

Claims 1, 6, 11-13, and 16-17 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,201,536, issued to Hendricks et al. (hereinafter referred to "Hendricks"). Though claims 1, 6, and 11 have been slightly amended to improve the Examiner's understanding of the scope of these claims, the

basic anticipation rejection is respectfully traversed for the following reasons.

"It is axiomatic that for prior art to anticipate under §102 it has to meet every element of the claimed invention, and that such a determination is one of fact." *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81, 90 (Fed. Cir. 1986). The instant rejection is respectfully traversed because Hendricks does not "meet every element of the claimed invention".

Claim 1 is limited by three key elements: 1) first processor which spools the video program into memory; 2) the video server memory which stores the spooled video; and 3) second processor which streams the spooled video from the video server memory. Thus, claim 1, and all claims depending therefrom, require a first processor to spool (i.e., process) the digital video and a second separate and different processor which streams the spooled video from memory to the user.

Hendricks utilizes a single processor (i.e., File Server 215) to both spool the incoming data and stream that data from memory. It is readily apparent from Figs. 2, 3a, 4, 5, 6a, 7, and 8 that all video signals (e.g., 222 224, and 226) are sent directly to File Server 215 via Signal Reception 234. Thus, it would be highly inefficient for Network Management CPU 260 to spool the video as clearly erroneously found by the Examiner.

Network Management CPU 260 only performs those network management functions apparent from its name (i.e., managing the

network). It does not spool or stream video. It simply controls File Server 215 which actually performs spooling and streaming of the video. Hendricks states at column 28, lines 42-44:

With the addresses, the network manager 214 can prompt or instruct the file server 215 to spool a specific MPEG data stream identified by its unique address.

Similarly, column 35, lines 10-11, states:

...the operations center (file server) spools the program requested by the subscriber.

The Examiner's argument that Network Management CPU 260 spools video is clearly erroneous in view of the text of Hendricks.

Hendricks utilizes File Server 215 to both spool the video data and stream the video data. As a result, the rejection of claim 1, and the claims depending therefrom, is respectfully traversed.

Claim 6, as amended, makes explicit that which was previously inherent, that the streaming processor "streams said spooled video program to said two subscribing television receivers as two streams if said separate spaced apart service requests are spaced apart by greater than a given time period" (emphasis added). In other words, even though the video program is streamed separately to the two requesters, because the time between the two requests is too great, the video program need not be respooled. It is simply "double streamed" from the same spooled digital video in memory. As stated by Hendricks and admitted by the Examiner:

Once the time is expired and additional requests for the same program is received, the additional requests are handled like an initial request.....

Thus, Hendricks requires the video program to be respooled, as if it never been previously requested. Applicants' claimed invention overcomes this inefficiency. Therefore, the rejection of claim 6, and claims depending therefrom, is respectfully traversed.

Claim 11, and the claims depending therefrom, are similarly distinguishable over Hendricks. In the claimed invention, the second video stream for the second requestor is from the same spooled video at the same memory location. As explained above, Hendricks respools the video as admitted by the Examiner. The rejection of claim 11, and the claims depending therefrom, is respectfully traversed.

Claim 12 depends from claim 11 and is further limited by a "requesting means" which is a "subscriber box". In making his rejection the Examiner states:

Regarding claim 12, Hendricks further discloses wherein said first requesting means further comprises a subscriber box (Fig. 4, 5, 6A and 7, element 292s).

A close review of Figs. 4 and 5 shows that elements 292 are only served by single directional cables which provide data to elements 292 but cannot conduct any request from elements 292 to Headend 208. Similarly, with regard to Figs. 6A and 7, the information paths between Headend 208 and nodes 288 are single directional. Therefore, if elements 292 were to generate

requests, there would be no vehicle shown which could conduct those requests to Headend 208. Thus, the rejection of claim 12, and the claims depending therefrom is respectfully traversed.

In rejecting claim 13, the Examiner cites column 11, lines 14-65+ to suggest that the streaming means (i.e., the Examiner has found File Server 215 to be the streaming means) is "an industry standard personal computer". Surely, the Examiner understands that "an industry standard person computer" means an IBM PC compatible architecture as is known in the art and stated in the specification.

In addition, the Examiner states in his rejection of claim 2:

Wherein the second processor further comprises an industry compatible, Windows NT based processor.....to improve the performance of Hendricks' VOD system.

Thus, the Examiner admits that Hendricks does not have an industry compatible processor, but agrees that it would be enhanced if it did.

Furthermore, the specific citation used describes Network Management CPU 260 and not File Manager 215. Thus, the rejection of claim 13, and claims depending therefrom is respectfully traversed.

In rejecting claim 16, the Examiner states:

Regarding claims (sic) 16, a method of providing video on demand services of method claim 16 is analyzed with respect to claim 11;

Applicants' arguments are provided above with respect to claim 11. On this basis, the rejection of claim 16, and the claims depending therefrom is respectfully traversed.

The rejection of claim 17 is respectfully traversed because Hendricks does not produce multiple streams from the same spooled program. As admitted by the Examiner, "the additional requests (from the 2nd subscriber) are handled like an initial request". Thus, the rejection of claim 17 and the claims depending therefrom is respectfully traversed.

The Examiner has rejected claims 2-5, 7-10, and 14-15 under 35 U.S.C. 103(a) as being obvious in view of Unisys Cellular Multiprocessing Architecture White Paper pages 1-6. This ground of rejection is respectfully traversed for failure of the Examiner to make a *prima facie* case of obviousness as required by MPEP 2143. To make a *prima facie* case, the Examiner must show: 1) motivation to make alleged combination; 2) likelihood of success of the alleged combination; and 3) all claimed elements within the alleged combination.

The Examiner does not even allege likelihood of success, much less present evidence thereof. Further more, the Examiner presents no evidence of motivation to make the alleged combination but simply concludes motivation. This is precisely

the unsupported conclusion attacked by the Court of Appeals for the Federal Circuit stating in part:

Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence". *In re Dembicza*k, 175 F.3d 994, 50 U.S.P.Q. 2d 1614 (Fed. Cir. 1999).

Therefore, the rejection of claims 2-5, 7-10, and 14-15 is respectfully traversed for failure of the Examiner to make a *prima facie* case of obviousness.

Claim 18 has been rejected as obvious in view of Hendricks. The Examiner takes the position that the five minute period of Hendricks could be reduced to the claimed one minute. He goes on to state:

Thus by setting the timer to "one minute", Hendricks's (sic) system would further reduce the writing time period of subscribers to receive the VOD program requested.

Whereas this is true, it does not account for the additional overhead which would be incurred by Hendricks, which treats the second request as an initial request if the timer expires. This would produce substantially more spooling of the same video and consume substantially more memory. That is probably the reason that Hendricks chose the very long period of five minutes for the timer. Shortening the timer of Hendricks exacerbates the lack of reasonable likelihood of success. The rejection of claim 18 is respectfully traversed for failure of the Examiner to provide a *prima facie* case of obviousness.

Claims 19-20 have been rejected as obvious over Hendricks in view of U.S. Patent No. 5,815,662, issued to Ong (hereinafter referred to as "Ong"). This ground of rejection is respectfully traversed for failure of the Examiner to make a *prima facie* case of obviousness. The Examiner presents no evidence of motivation or reasonable likelihood of success.

Having thus responded to each objection and ground of rejection, Applicants respectfully request entry of this amendment and allowance of claims 1-20, being the only pending claims.

Respectfully submitted,

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By their attorney,

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APPENDIX A (Support for Claim Amendments)

CLAIMS

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1. (Second Amended) In a video on demand system for supplying requested video data to a plurality of subscriber receivers, the improvement comprising:

a. a first processor which spools said requested video data in response to said request;

b. a video server memory responsively coupled to said first processor in which said spooled requested video data is stored; and

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c. a second processor responsively coupled to said video server memory and said subscriber receiver which streams said spooled requested video data from said video server memory to said plurality of subscriber receivers in a plurality of streams spaced apart by a predetermined time.

2. (Once Amended) The video on demand system of claim 1 wherein video server said memory further comprises a Unisys CMP memory platform.

3. (Once Amended) The video on demand system of claim 2 wherein said second processor further comprises an industry compatible, Windows NT based processor.

4. (Once Amended) The video on demand system of claim 3 wherein said first processor further comprises a transaction server responsively coupled to said subscribing receiver and said video server memory.

5. (Unchanged) The video on demand system of claim 4 wherein said requested video data further comprises MPEG-2 format.

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6. (Second Amended) An apparatus comprising:
 - a. two subscribing television receivers each of which providing a separate spaced apart service request for a video program;
 - b. A memory having said video program in spooled form corresponding to said service request; and
 - c. A processor responsively coupled to said memory and said two subscribing cable television receivers which streams said spooled video program to said two subscribing television receivers as a single stream if said separate spaced apart service request are spaced apart by less than a given time period and which streams said spooled video program to said two subscribing television receivers as two streams if said separate spaced apart service requests are spaced apart by greater than a given time period.
 7. (Unchanged) An apparatus according to claim 6 wherein said processor comprises an industry compatible, Windows NT based processor.
 8. (Unchanged) An apparatus according to claim 7 wherein said memory comprises a Unisys CMP memory platform.
 9. (Unchanged) An apparatus according to claim 8 wherein said spooled video program further comprises MPEG-2
 10. (Unchanged) An apparatus according to claim 9 further comprising a transaction server responsively coupled to said subscribing television receiver and said memory.

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11. (Second Amended) A video on demand system comprising:

- a. First means for requesting a video on demand program at a first time;
- b. Second means for requesting said video on demand program at a later second time;
- c. Means responsively coupled to said first requesting means for storing said requested video on demand program; and
- d. Means responsively coupled to said storing means for streaming said requested video on demand program once if a difference between said second time and said first time is less than a predetermined interval and twice from said storing means if said difference is greater than said predetermined interval.

12. (Once Amended) A video on demand system according to claim 11 wherein said first requesting means further comprises a subscriber box.

13. (Unchanged) A video on demand system according to claim 12 wherein said streaming means further comprises an industry standard personal computer.

14. (Unchanged) A video on demand system according to claim 13 wherein said storing means further comprises a Unisys CMP memory platform.

15. (Once Amended) A video on demand system according to claim 14 further comprising a transaction subsystem responsively coupled to said first requesting means and said storing means for spooling said requested video on demand program into said storing means and for managing archival storage of video streams in a hierarchical storage management system that is integrated with the management application and requires no manual intervention.

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16. (Once Amended) A method of providing video on demand services comprising:

- a. Generating a video on demand request from a first subscriber at a first time;
- b. Generating a similar video on demand request from a second subscriber at a second later time;
- c. Storing a video program corresponding to said video on demand request; [and]
- d. Streaming said corresponding video program from said storage to said first subscriber and said second subscriber beginning at a third time if a difference between said second later time and said first time is less than a predetermined interval.

17. (Once Amended) A method according to claim 16 further comprising:

- a. streaming said corresponding video program to said first subscriber at said third time and second streaming said corresponding video program to said second subscriber at a fourth time if said difference between said second later time and said first time is greater than a predetermined interval.

18. (Once Amended) A method according to claim 17 wherein said predetermined interval further comprises one minute.

19. (Once Amended) A method according to claim 18 further comprising:

- a. Fast forwarding said streaming in response to a fast forward from said first subscriber.

20. (Once Amended) A method according to claim 19 wherein said processing step further comprises:

- a. Performing subscriber accounting to enable billing said subscriber for said video on demand request.